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10/015,991	12/06/2001	Yuuji Saiki	020606	3509

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EXAMINER

LAVARIAS, ARNEL C

ART UNIT PAPER NUMBER

2872

DATE MAILED: 02/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/015,991

Applicant(s)

SAIKI ET AL.

Examiner

Arnel C. Lavarias

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12/1/04, 10/21/04.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10, 13, 16-20, 22-28, 30 and 31 is/are pending in the application.
- 4a) Of the above claim(s) 17-20 and 22-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 13, 16, 27-28, 30-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submissions filed on 10/21/04 and 12/1/04 have been entered.

### ***Response to Amendment***

2. The amendments to Claims 5, 10, 13, 17, 20, 22, and 24 in the submissions dated 10/21/04 and 12/1/04 are acknowledged and accepted.
3. The cancellation of Claims 11-12, 14-15, 21, and 29 in the submissions dated 10/21/04 and 12/1/04 is acknowledged and accepted.

### ***Election/Restrictions***

4. The Examiner notes that the instant application was previously subject to a restriction requirement in the Office Action, dated 9/4/03, the examined species also having been constructively elected by original presentation in Section 5 of the Office Action, dated 9/4/03. Since a request for continued examination was filed under 37 CFR 1.114, the

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species previously elected, i.e. Species I, Claims 1-4, 9-10, as well as generic Claims 5-8, 13, 16, will be examined in the instant application.

5. The Applicants' traversal of the restriction requirement in Section 5 of the Office Action dated 9/4/03 is acknowledged. The traversal is on the ground(s) that Claims 17 and 24 (i.e. the independent claims drawn to Species II and III, respectively) now recite that a surface of an optical material is bonded to and covered with a protective film having an outer surface roughness Ra of from 0.03 to 1  $\mu\text{m}$ , as also recited in Claims 1 and 5. This is not found persuasive because Species I, II, and III were restricted on the basis of the mutually exclusive subject matter as previously set forth in Section 5 of the Office Action dated 9/4/03, i.e. Species I is drawn to an optical member including a protective film comprising a protective base and an adhesive layer disposed on the protective base so that the protective base can be released together with the adhesive layer from the optical material, which is not in Species II and III; Species II is drawn to an optical member including a protective film, wherein the optical member comprises a polarizing plate having a transparent protective layer on one or both faces of a polarizing film, and the protective film is disposed on the transparent protective layer of the polarizing plate, which is not in Species I and III; and Species III is drawn to an optical member including a protective film, wherein a reflecting layer having a fine undulating structure is disposed on the protective film, which is not in Claims I and II.

The requirement is still deemed proper and is therefore made FINAL.

***Response to Arguments***

6. The Applicants' arguments filed 12/1/04 and 10/21/04 have been fully considered but they are not persuasive.
7. The Applicants argue that, with respect to Claim 1, the combined teachings of Nagahama et al. and Arakawa et al. fail to disclose or reasonably suggest an optical member in which a surface of an optical material is bonded to and covered with a protective film having an outer surface roughness Ra of from 0.03 to 1  $\mu\text{m}$ . The Examiner respectfully disagrees. As pointed out by Applicants, Arakawa et al. specifically discloses that the Ra of the protective film/separator being  $\frac{1}{2}$  or less (preferably  $\frac{1}{4}$  to  $\frac{1}{10}$ ) of the film thickness, the film thickness being 50  $\mu\text{m}$  or less (preferably 20-40  $\mu\text{m}$ ). Further, Arakawa et al. specifically discloses that *the surface roughness Ra of the protective film/separator is 25  $\mu\text{m}$  or less* (preferably 2-10  $\mu\text{m}$ ) (See col. 2, lines 27-55 of Arakawa et al.). Clearly, Applicants' range of surface roughness Ra is encompassed by that disclosed in Arakawa et al. Additionally, with regard to arguments regarding specific properties of the protective film/separator, it is noted that the features upon which applicant relies (i.e., light scattering, reflecting, and transparency properties of the protective film/separator) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).
8. Similarly, Applicants argue that, with respect to newly amended Claim 5, the combined teachings of Nagahama et al. and Arakawa et al. fail to disclose or reasonably

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suggest an optical member including a separator having an outer surface roughness Ra of from 0.03 to 1  $\mu\text{m}$ . The Examiner respectfully disagrees. As pointed out by Applicants, Arakawa et al. specifically discloses that the Ra of the protective film/separator being  $\frac{1}{2}$  or less (preferably  $\frac{1}{4}$  to  $\frac{1}{10}$ ) of the film thickness, the film thickness being 50  $\mu\text{m}$  or less (preferably 20-40  $\mu\text{m}$ ). Further, Arakawa et al. specifically discloses that *the surface roughness Ra of the protective film/separator is 25  $\mu\text{m}$  or less* (preferably 2-10  $\mu\text{m}$ ) (See col. 2, lines 27-55 of Arakawa et al.). Clearly, Applicants' range of surface roughness Ra is encompassed by that disclosed in Arakawa et al. Additionally, with regard to arguments regarding specific properties of the protective film/separator, it is noted that the features upon which applicant relies (i.e., light scattering, reflecting, and transparency properties of the protective film/separator) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

9. Claims 1-10, 13, 16, 27-28, 30-31 are rejected as follows.

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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11. Claims 1-3, 9-10, 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagahama et al. (WO00/44841), of record, in view of Arakawa et al. (U.S. Patent No. 5972473), of record.

Nagahama et al. discloses an optical member (See Figure 7) in which a surface of an optical material (See 15, 16 in Figure 7) is bonded to and covered with a protective film (See 11, 12 or 14, 11 in Figure 7), wherein the protective film comprises a protective base and an adhesive layer disposed on the protective base so that the protective base can be released together with the adhesive layer from the optical material (See Abstract; 11, 12 or 11, 14 in Figure 7). Nagahama et al. additionally discloses the protective film being disposed on one surface of the optical material (See for example 11, 12 in Figure 7), a separator being provided on the other surface of the optical material via an adhesive layer (See 11, 14 in Figure 7), the optical material comprising a polarizing plate (See 16 in Figure 7), a liquid display having the optical member (See Abstract); and the protective film thickness not being more than 300  $\mu\text{m}$  (See for example Page 7 (Page 14 of translation), as well as various disclosed examples of the protective film on Pages 17-27 (Pages 31-47 of the translation)). Nagahama et al. lacks the protective film having an outer surface roughness  $R_a$  of from 0.03 to 1  $\mu\text{m}$ . However, Arakawa et al. teaches the use of a protective plastic film that has a matte or embossed surface (See for example Figure 4), the protective plastic film being used as a separator or protective film (See Abstract). In particular, Arakawa et al. teaches that the outer surface of the protective film may have a surface roughness  $R_a$  (which is typically 2-25 microns for exemplary film thicknesses of 20-50  $\mu\text{m}$ ) that is at most  $\frac{1}{2}$  of the protective film thickness and

generally is 25  $\mu\text{m}$  or less (See col. 2, lines 26-50). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the protective film of Nagahama et al. exhibit an outer surface roughness Ra of from 0.03-1  $\mu\text{m}$ , as taught by Arakawa et al., for the purpose of reducing the friction coefficient of the surface of the film.

12. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nagahama et al. in view of Arakawa et al. as applied to Claim 1 above, and further in view of Iwata et al. (U.S. Patent No. 6111699), of record.

Nagahama et al. in view of Arakawa et al. discloses the invention as set forth above in Claim 1, except for the optical material further including at least one of a retardation plate and a brightness enhancement plate. However, Iwata et al. discloses an optical member (See for example Figures 6B, 7, 11) in which an adhesive layer (See 34 of Figure 6B) is disposed on an outermost surface of an optical material (See 12 in Figure 6B) is provisionally bonded to and covered with a separator (See 36 in Figure 6B). Iwata et al. additionally discloses the separator being disposed on one surface of the optical material (See Figures 6B, 7), a protective film being provided on the other surface of the optical material (See 18, 32 in Figures 6B) having an outer surface roughness Ra of at least 0.03  $\mu\text{m}$  (See Abstract; col. 5, lines 50-65), the optical material comprising a polarizing plate and at least one of a retardation plate and a brightness enhancement plate (See for example 42 in Figure 7; 42, 86 in Figure 11), and a liquid display having the optical member (See for example col. 10, line 25-32). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the optical



material further include at least one of a retardation plate and a brightness enhancement plate, as taught by Iwata et al., in the optical member of Nagahama et al. in view of Arakawa et al., for the purpose of reducing the cost and complexity of manufacturing the liquid crystal display panel.

13. Claims 5-7, 13, 16, 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagahama et al. in view of Arakawa et al.

Nagahama et al. discloses an optical member (See Figure 7) in which an adhesive layer disposed on an outermost surface of an optical material is provisionally bonded to and covered with a separator so that the separator can be released from the optical material (See 11, 14 in Figure 7). Nagahama et al. additionally discloses a protective film being disposed on one surface of the optical material (See for example 11, 12 in Figure 7), the separator being provided on the other surface of the optical material via an adhesive layer (See 11, 14 in Figure 7), the optical material comprising a polarizing plate (See 16 in Figure 7), a liquid display having the optical member (See Abstract); and the protective film thickness not being more than 300  $\mu\text{m}$  (See for example Page 7 (Page 14 of translation), as well as various disclosed examples of the protective film on Pages 17-27 (Pages 31-47 of the translation)). Nagahama et al. lacks the separator having an outer surface roughness  $R_a$  of from 0.03-1  $\mu\text{m}$ . However, Arakawa et al. teaches the use of a protective plastic film that has a matte or embossed surface (See for example Figure 4), the protective plastic film being used as a separator or protective film (See Abstract). In particular, Arakawa et al. teaches that the outer surface of the protective film may have a surface roughness  $R_a$  (which is typically 2-25 microns for exemplary film thicknesses of

20-50  $\mu\text{m}$ ) that is at most  $\frac{1}{2}$  of the protective film thickness and generally is 25  $\mu\text{m}$  or less (See col. 2, lines 26-50). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the protective film of Nagahama et al. exhibit an outer surface roughness Ra of from 0.03-1  $\mu\text{m}$ , as taught by Arakawa et al., for the purpose of reducing the friction coefficient of the surface of the film.

14. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nagahama et al. in view of Arakawa et al. as applied to Claim 5 above, and further in view of Iwata et al.

Nagahama et al. in view of Arakawa et al. discloses the invention as set forth above in Claim 5, except for the optical material further including at least one of a retardation plate and a brightness enhancement plate. However, Iwata et al. discloses an optical member (See for example Figures 6B, 7, 11) in which an adhesive layer (See 34 of Figure 6B) is disposed on an outermost surface of an optical material (See 12 in Figure 6B) is provisionally bonded to and covered with a separator (See 36 in Figure 6B). Iwata et al. additionally discloses the separator being disposed on one surface of the optical material (See Figures 6B, 7), a protective film being provided on the other surface of the optical material (See 18, 32 in Figures 6B) having an outer surface roughness Ra of at least 0.03  $\mu\text{m}$  (See Abstract; col. 5, lines 50-65), the optical material comprising a polarizing plate and at least one of a retardation plate and a brightness enhancement plate (See for example 42 in Figure 7; 42, 86 in Figure 11), and a liquid display having the optical member (See for example col. 10, line 25-32). Therefore, it would have been obvious to

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one having ordinary skill in the art at the time the invention was made to have the optical material further include at least one of a retardation plate and a brightness enhancement plate, as taught by Iwata et al., in the optical member of Nagahama et al. in view of Arakawa et al., for the purpose of reducing the cost and complexity of manufacturing the liquid crystal display panel.

### *Conclusion*

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arnel C. Lavarias whose telephone number is 571-272-2315. The examiner can normally be reached on M-F 9:30 AM - 6 PM EST.

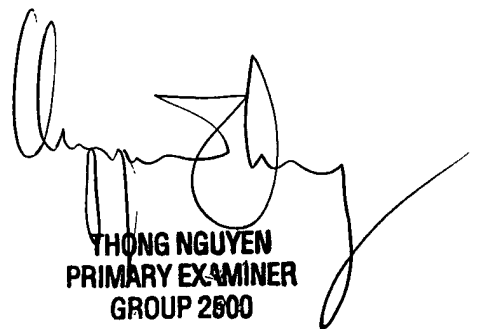
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on 571-272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Arnel C. Lavarias  
2/9/05



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